



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,644	07/01/2003	Peter J. Dehlinger	33293-8013.US00	3641
22918	7590	07/01/2005	EXAMINER	
PERKINS COIE LLP P.O. BOX 2168 MENLO PARK, CA 94026			CORRIELUS, JEAN M	
			ART UNIT	PAPER NUMBER

2162

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/612,644

Applicant(s)

DEHLINGER ET AL.

Examiner

Jean M Corrielus

Art Unit

2162

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This office action is in response to the application filed on July 01, 2003, in which claims 1-22 are presented for examination.

Drawings

2. Applicants are required to furnish the formal drawings in response to this office action if the formal drawings have not been submitted. No new matter may be introduced in the required drawings. Failure to timely submit a drawing will result in ABANDONMENT of the application.

Claim Objections

3. Claims 1, 16 are objected to because of the following informalities: claim 1, line 12, claim 16 lines 27 and claim 22, line 4, please delete “and”; claim line 15, claim 16 line 30 and claim 22 line 7, please delete the period (.) after the word term. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-22 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-22 recite “that” in the entire claimed language. Applicants are reminded that pronouns are not permitted in the claimed language, only what is being referred by “that” should be set forth in the claim.

Double Patenting

6. The non statutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-22 are provisionally rejected under the judicially created doctrine of double patenting over claims 1-26 of copending Application No. 10/374,877. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons: Claim 1 of the instant application substantially recites the limitations of claim 1 of the cited co-pending application. The claim merely omits certain the underlined limitations and replaces the bolded limitations as shown in comparison table 1 below.

Art Unit: 2162

Application Claim 1	Co-pending Application 1
<p>1. A computer-executed method for classifying a target document in the form of a digitally encoded natural-language text into one or more of two or more different classes, comprising the steps of:</p> <p>(a) for each of a plurality of <u>terms selected from one of (i) non-generic words in the document, (ii) proximately arranged word groups in the document, and (iii) a combination of (i) and (ii), determining a selectivity value calculated as the frequency of occurrence of that term in a library of texts in one field, relative to the frequency of occurrence of the same term in one or more other libraries of texts in one or more other fields, respectively, and</u></p> <p><u>(b) representing the document as a vector of terms, where the coefficient assigned to each term is a function of the selectivity value determined for that term.</u></p> <p>(c) determining for each of a plurality of sample texts, a match score related to the number of descriptive terms present in or derived from that text that match those in the target document, where each of the plurality of sample texts has an associated classification identifier that identifies the one of more different classes to which that text belongs,</p> <p>(d) selecting one or more of the sample texts having the highest match scores;</p> <p>(e) recording the one or more classification identifiers associated with the one or more sample texts having the highest match scores; and</p> <p>(f) associating the one or more classification identifiers from <u>step (e)</u> with the target document, thereby to classify the target document as belonging to one or more classes represented by at least one of the classification identifiers from <u>step (e)</u>.</p>	<p>1. A computer-executed method for classifying a target document in the form of a digitally encoded natural-language text into one or more of two or more different classes, comprising the steps of:</p> <p>(a) for each of a plurality of terms composed of non-generic words and optionally, proximately arranged word groups in the target document, and selecting that term as a descriptive term if the term has an above-threshold selectivity value of a term in a library of texts in a field, where the selectivity value of a term in a library of texts in a field is related to the frequency of occurrence of the a term in a library, relative to the frequency of occurrence of the same term in one or more other libraries of texts in one or more other fields, respectively, and</p> <p>(b) determining for each of a plurality of sample texts, a match score related to the number of descriptive terms present in or derived from that text that match those in the target document, where each of the plurality of sample texts has an associated classification identifier that identifies the one of more different classes to which that text belongs,</p> <p>(c) selecting one or more of the sample texts having the highest match scores;</p> <p>(d) recording the one or more classification identifiers associated with the one or more sample texts having the highest match scores; and</p> <p>(e) associating the one or more classification identifiers from step (d) with the target document, thereby to classify the target document as belonging to one or more classes represented by at least one of the classification identifiers from step (d).</p>

Table 1

It would have been obvious to one of ordinary skill in the art of data processing at the time the invention was made to modify the cited steps as indicated claim 1 of the instant US application since the omission and addition of the cited limitations would have not changed the process according to which the process of for classifying a target document in the form of a digitally encoded text as belonging to one or more of a plurality of different classes. Therefore, the ordinary skilled artisan would have been also motivated to modify claim 1 of the cited instant US application by subtitling the steps of selected from one of (i) non-generic words in the document, (ii) proximately arranged word groups in the document, and (iii) a combination of (i) and (ii), determining a selectivity value calculated as the frequency of occurrence of that term in a library of texts in one field, relative to the frequency of occurrence of the same term in one or more other libraries of texts in one or more other fields, respectively with the steps of **composed of non-generic words and optionally, proximately arranged word groups characterizing the target document, selecting that term as a descriptive term if the term has an above-**

Art Unit: 2162

threshold selectivity value in at least one library of text in a field, by (i) accessing said database and (ii) calculating or recording from the database, the selectivity value associated with that term. The cited omitting elements would not interfere with the functionality of the steps previously claimed and would perform the same function. In re Karlson, 136 USPQ 184 (CCPA 1963).

The dependent claims 2-15 of the instant application are rejected for fully incorporating the errors of the respective base claims by dependency.

Application Claim 16	Co-pending Application 16
<p>16. An automated system for classifying a target document in the form of a digitally encoded text as belonging to one or more of a plurality of different classes comprising</p> <p>(1) a computer,</p> <p>(2) accessible by said computer, a database of word records, where each record includes text identifiers of the library texts that contain that word, associated library and classification identifiers for each text, and optionally, one or more selectivity values for each word, where the selectivity value of a term in a library of texts in a field is related to the frequency of occurrence of that term in said library, relative to the frequency of occurrence of the same term in one or more other libraries of texts in one or more other fields, respectively,</p> <p>(3) a computer readable code which is operable, under the control of said computer, to perform steps comprising:</p> <p>(a) for each of a plurality of terms <u>selected from one of (i) non-generic words in the document, (ii) proximately arranged word groups in the document, and (iii) a combination of (i) and (ii), determining a selectivity value calculated as the frequency of occurrence of that term in a library of texts in one field, relative to the frequency of occurrence of the same term in one or more other libraries of texts in one or more other fields, respectively;</u></p> <p>(b) <u>representing the document as a vector of terms, where the coefficient assigned to each term is a function of the selectivity value determined for that term</u></p> <p>(c) determining for each of a plurality of sample texts, a match score related to the number of descriptive terms present in or derived from that text that match those in the target document, <u>where each of the plurality of sample texts has an associated classification identifier that identifies the one of more different classes to which that text belongs,</u></p>	<p>16. An automated system for classifying a target document in the form of a digitally encoded text as belonging to one or more of a plurality of different classes comprising</p> <p>(1) a computer,</p> <p>(2) accessible by said computer, a database of word records, where each record includes text identifiers of the library texts that contain that word, associated library and classification identifiers for each text, and optionally, one or more selectivity values for each word, where the selectivity value of a term in a library of texts in a field is related to the frequency of occurrence of that term in said library, relative to the frequency of occurrence of the same term in one or more other libraries of texts in one or more other fields, respectively,</p> <p>(3) a computer readable code which is operable, under the control of said computer, to perform steps comprising:</p> <p>(a) for each of a plurality of terms <u>composed of non-generic words and optionally, proximately arranged word groups characterizing the target document, selecting that term as a descriptive term if the term has an above-threshold selectivity value in at least one library of text in a field, by (i) accessing said database and (ii) calculating or recording from the database, the selectivity value associated with that term</u></p> <p>(b) determining for each of a plurality of sample texts, a match score related to the number of descriptive terms present in or derived from that text that match those in the target document;</p> <p>(c) selecting one or more of the <u>library texts</u> having the highest match scores,</p> <p>(d) recording the one or more classification identifiers associated with the one or more <u>library texts</u> having the highest match scores, and</p> <p>(e) associating the one or more classification identifiers from step (d) with the target document, thereby to</p>

<p>(d) selecting one or more of the <u>sample texts</u> having the highest match scores,</p> <p>(e) recording the one or more classification identifiers associated with the one or more <u>sample texts</u> having the highest match scores, and</p> <p>(f) associating the one or more classification identifiers from step (e) with the target document, thereby to classify the target document as belonging to one or more classes represented by at least one of the classification identifiers from step (e).</p>	<p>classify the target document as belonging to one or more classes represented by at least one of the classification identifiers from step (d).</p>
--	--

Table 2

It would have been obvious to one of ordinary skill in the art of data processing at the time the invention was made to modify the cited steps as indicated claim 16 of the instant US application since the omission and addition of the cited limitations would have not changed the process according to which the process of for classifying a target document in the form of a digitally encoded text as belonging to one or more of a plurality of different classes. Therefore, the ordinary skilled artisan would have been also motivated to modify claim 16 of the cited instant US application by subtitling the steps of selected from one of (i) non-generic words in the document, (ii) proximately arranged word groups in the document, and (iii) a combination of (i) and (ii), determining a selectivity value calculated as the frequency of occurrence of that term in a library of texts in one field, relative to the frequency of occurrence of the same term in one or more other libraries of texts in one or more other fields, respectively with the steps of composed of non-generic words and optionally, proximately arranged word groups characterizing the target document, selecting that term as a descriptive term if the term has an above-threshold selectivity value in at least one library of text in a field, by (i) accessing said database and (ii) calculating or recording from the database, the selectivity value associated with that term. The cited omitting elements would not interfere with the functionality of the steps previously claimed and would perform the same function. In re Karlson, 136 USPQ 184 (CCPA 1963).

The dependent claims 17-21 of the instant application are rejected for fully incorporating the errors of their respective base claims by dependency.

Application Claim 22	Co-pending Application 22
<p>22. Computer readable code for use with an electronic computer and a database word records in classifying a target document in the form of a digitally encoded text as belonging to one or more of a plurality of different classes, where each record in the word records database includes text identifiers of the library texts that contain that word, an associated library identifier for each text, an associated classification identifier for each text, and optionally, one or more selectivity values for each word, where the selectivity value of a term in a library of texts in a field is related to the frequency of occurrence of that term in said library, relative to the frequency of occurrence of the same term in one or more other libraries of texts in one or more other fields, respectively, said code being operable, under the control of said computer, to perform steps comprising:</p> <p>(a) for each of a plurality of terms <u>selected from one of (i) non-generic words in the document, (ii) proximately arranged word groups in the document, and (iii) a combination of (i) and (ii), determining a selectivity value calculated as the frequency of occurrence of that term in a library of texts in one field, relative to the frequency of occurrence of the same term in one or more other libraries of texts in one or more other fields, respectively;</u></p> <p>(b) <u>representing the document as a vector of terms, where the coefficient assigned to each term is a function of the selectivity value determined for that term</u></p> <p>(c) determining for each of a plurality of sample texts, a match score related to the number of descriptive terms present in or derived from that text that match those in the target document, <u>where each of the plurality of sample texts has an associated classification identifier that identifies the one of more different classes to which that text belongs.</u></p> <p>(d) selecting one or more of the <u>sample texts</u> having the highest match scores,</p> <p>(e) recording the one or more classification identifiers associated with the one or more <u>sample texts</u> having the highest match scores, and</p> <p>(f) associating the one or more classification identifiers from step (e) with the target document, thereby to classify the target document as belonging to one or more classes represented by at least one of the classification identifiers from step (e).</p>	<p>22. Computer readable code for use with an electronic computer and a database word records in classifying a target document in the form of a digitally encoded text as belonging to one or more of a plurality of different classes, where each record in the word records database includes text identifiers of the library texts that contain that word, an associated library identifier for each text, an associated classification identifier for each text, and optionally, one or more selectivity values for each word, where the selectivity value of a term in a library of texts in a field is related to the frequency of occurrence of that term in said library, relative to the frequency of occurrence of the same term in one or more other libraries of texts in one or more other fields, respectively, said code being operable, under the control of said computer, to perform steps comprising:</p> <p>a) for each of a plurality of terms composed of non-generic words and optionally, proximately arranged word groups characterizing the target document, selecting that term as a descriptive term if the term has an above-threshold selectivity value in at least one library of text in a field, by (i) accessing said database and (ii) calculating or recording from the database, the selectivity value associated with that term;</p> <p>(b) determining for each of a plurality of sample texts, a match score related to the number of descriptive terms present in or derived from that text that match those in the target document;</p> <p>(c) selecting one or more of the library texts having the highest match scores,</p> <p>(d) recording the one or more classification identifiers associated with the one or more library texts having the highest match scores, and</p> <p>(e) associating the one or more classification identifiers from step (d) with the target document, thereby to classify the target document as belonging to one or more classes represented by at least one of the classification identifiers from step (d).</p>

Table 3

It would have been obvious to one of ordinary skill in the art of data processing at the time the invention was made to modify the cited steps as indicated claim 22 of the instant US application since the omission and addition of the cited limitations would have not changed the process according to which the process of for classifying a target document in the form of a digitally encoded text as belonging to one or more of a plurality of different classes. Therefore, the ordinary skilled artisan would have been also motivated to modify claim 22 of the cited instant US application by subtitling the steps of selected from one of (i) non-generic words in the document, (ii) proximately arranged word groups in the document, and (iii) a combination of (i) and (ii), determining a selectivity value calculated as the frequency of occurrence of that term in a library of texts in one field, relative to the frequency of occurrence of the same term in one or more other libraries of texts in one or more other fields, respectively with the steps of **composed of non-generic words and optionally, proximately arranged word groups characterizing the target document, selecting that term as a descriptive term if the term has an above-threshold selectivity value in at least one library of text in a field, by (i) accessing said database and (ii) calculating or recording from the database, the selectivity value associated with that term.** The cited omitting elements would not interfere with the functionality of the steps previously claimed and would perform the same function. In re Karlson, 136 USPQ 184 (CCPA 1963).

7. Claims 1-22 are provisionally rejected under the judicially created doctrine of double patenting over claims 1-25 of copending Application No. 10/384,486. This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons: Claim 1 of the instant application substantially recites the limitations of claim 1 of the cited co-pending application. The claim merely omits

Art Unit: 2162

certain the underlined limitations and replaces the bolded limitations as shown in comparison table 1 below.

Application Claim 1	Co-pending Application 1
<p>1. A computer-executed method for classifying a target document in the form of a digitally encoded natural-language text into one or more of two or more different classes, comprising the steps of:</p> <p>(a) for each of a plurality of <u>terms selected from one of (i) non-generic words in the document, (ii) proximately arranged word groups in the document, and (iii) a combination of (i) and (ii), determining a selectivity value calculated as the frequency of occurrence of that term in a library of texts in one field, relative to the frequency of occurrence of the same term in one or more other libraries of texts in one or more other fields, respectively, and</u></p> <p>(b) representing the document as a vector of terms, where the coefficient assigned to each term is a function of the selectivity value determined for that term.</p> <p>(c) <u>determining for each of a plurality of sample texts, a match score related to the number of descriptive terms present in or derived from that text that match those in the target document, where each of the plurality of sample texts has an associated classification identifier that identifies the one of more different classes to which that text belongs,</u></p> <p>(d) <u>selecting one or more of the sample texts having the highest match scores;</u></p> <p>(e) <u>recording the one or more classification identifiers associated with the one or more sample texts having the highest match scores; and</u></p> <p>(f) <u>associating the one or more classification identifiers from step (e) with the target document, thereby to classify the target document as belonging to one or more classes represented by at least one of the classification identifiers from step (e).</u></p>	<p>1. A computer-executed method for classifying a target document in the form of a digitally encoded natural-language text into one or more of two or more different classes, comprising the steps of:</p> <p>(a) for each of a plurality of terms composed of non-generic words and optionally, proximately arranged word groups in the target document, and selecting that term as a descriptive term if the term has an above-threshold selectivity value of a term in a library of texts in a field, where the selectivity value of a term in a library of texts in a field is related to the frequency of occurrence of the a term in a library, relative to the frequency of occurrence of the same term in one or more other libraries of texts in one or more other fields, respectively, and</p> <p>(b) representing the document as a vector of terms, where the coefficient assigned to each term is a function of the selectivity value determined for that term.</p>

Table 4

It would have been obvious to one of ordinary skill in the art of data processing at the time the invention was made to modify the cited steps as indicated claim 1 of the instant US application since the omission and addition of the cited limitations would have not changed the process according to which the process of for classifying a target document in the form of a digitally encoded text as belonging to one or more of a plurality of different classes. Therefore, the ordinary skilled artisan would have been also motivated to modify claim 1 of the cited instant US application by subtitling the steps of selected from one of (i) non-generic words in the document, (ii) proximately arranged word groups in the document, and (iii) a combination of (i) and (ii), determining a selectivity value calculated as the frequency of occurrence of that term in a library of texts in one field, relative to the frequency of occurrence of the same term in one or more other libraries of texts in one or more other fields,

Art Unit: 2162

respectively with the steps of composed of non-generic words and optionally, proximately arranged word groups characterizing the target document, selecting that term as a descriptive term if the term has an above-threshold selectivity value in at least one library of text in a field, by (i) accessing said database and (ii) calculating or recording from the database, the selectivity value associated with that term, in claim 1 of the co-pending application, of claim 1 of the co-pending application, and deleting the steps of (c) determining for each of a plurality of sample texts, a match score related to the number of descriptive terms present in or derived from that text that match those in the target document, where each of the plurality of sample texts has an associated classification identifier that identifies the one of more different classes to which that text belongs,(d) selecting one or more of the sample texts having the highest match scores; (e) recording the one or more classification identifiers associated with the one or more sample texts having the highest match scores; and (f) associating the one or more classification identifiers from step (e) with the target document, thereby to classify the target document as belonging to one or more classes represented by at least one of the classification identifiers from step (e). The cited omitting elements would not interfere with the functionality of the steps previously claimed and would perform the same function. In re Karlson, 136 USPQ 184 (CCPA 1963).

The dependent claims 2-15 of the instant application are rejected for fully incorporating the errors of the respective base claims by dependency.

Art Unit: 2162

Application Claim 16	Co-pending Application 11
<p>16. An automated system for classifying a target document in the form of a digitally encoded text as belonging to one or more of a plurality of different classes comprising</p> <p>(1) a computer,</p> <p>(2) accessible by said computer, a database of word records, where each record includes text identifiers of the library texts that contain that word, associated library and classification identifiers for each text, and optionally, one or more selectivity values for each word, where the selectivity value of a term in a library of texts in a field is related to the frequency of occurrence of that term in said library, relative to the frequency of occurrence of the same term in one or more other libraries of texts in one or more other fields, respectively,</p> <p>(3) a computer readable code which is operable, under the control of said computer, to perform steps comprising:</p> <p>(a) for each of a plurality of terms <u>selected from one of (i) non-generic words in the document, (ii) proximately arranged word groups in the document, and (iii) a combination of (i) and (ii), determining a selectivity value calculated as the frequency of occurrence of that term in a library of texts in one field, relative to the frequency of occurrence of the same term in one or more other libraries of texts in one or more other fields, respectively;</u></p> <p>(b) representing the document as a vector of terms, where the coefficient assigned to each term is a function of the selectivity value determined for that term;</p> <p>(c) <u>determining for each of a plurality of sample texts, a match score related to the number of descriptive terms present in or derived from that text that match those in the target document, where each of the plurality of sample texts has an associated classification identifier that identifies the one of more different classes to which that text belongs,</u></p> <p>(d) <u>selecting one or more of the sample texts having the highest match scores,</u></p> <p>(e) <u>recording the one or more classification identifiers associated with the one or more sample texts having the highest match scores, and</u></p> <p>(f) <u>associating the one or more classification identifiers from step (e) with the target document, thereby to classify the target document as belonging to one or more classes represented by at least one of the classification identifiers from step (e).</u></p>	<p>11. An automated system for classifying a target document in the form of a digitally encoded text as belonging to one or more of a plurality of different classes comprising</p> <p>(1) a computer,</p> <p>(2) accessible by said computer, a database of word records, where each record includes text identifiers of the library texts that contain that word, associated library and classification identifiers for each text, and optionally, one or more selectivity values for each word, where the selectivity value of a term in a library of texts in a field is related to the frequency of occurrence of that term in said library, relative to the frequency of occurrence of the same term in one or more other libraries of texts in one or more other fields, respectively,</p> <p>(3) a computer readable code which is operable, under the control of said computer, to perform steps comprising:</p> <p>(a) accessing said database to determine, for each of a plurality of terms composed of non-generic words and optionally, proximately arranged word groups characterizing the target document, selecting that term as a descriptive term if the term has an above-threshold selectivity value in at least one library of text in a field, by (i) accessing said database and (ii) calculating or recording from the database, the selectivity value associated with that term; and</p> <p>(b) representing the document as a vector of terms, where the coefficient assigned to each term is a function of the selectivity value determined for that term.</p>

Table 5

It would have been obvious to one of ordinary skill in the art of data processing at the time the invention was made to modify the cited steps as indicated claim 16 of the instant US application since the omission and addition of the cited limitations would have not changed the process according to which the process of for classifying a target document in the form of a digitally encoded text as belonging to one or more of a plurality of different classes. Therefore, the ordinary skilled artisan would have been also motivated to modify claim 16 of the cited instant US application by substituting the steps of selected from one of (i) non-generic words in the document, (ii) proximately arranged word groups in the document, and (iii) a combination of (i) and (ii), determining a selectivity value calculated as the frequency of occurrence of that term in a library of texts in one field, relative to the frequency of occurrence of the same term in one or more other libraries of texts in one or more other fields, respectively with the steps of **accessing said database to determine, for each of a plurality of terms composed of non-generic words and optionally, proximately arranged word groups characterizing the target document, selecting that term as a descriptive term if the term has an above-threshold selectivity value in at least one library of text in a field, by (i) accessing said database and (ii) calculating or recording from the database, the selectivity value associated with that term, of claim 11 of the co-pending application; and deleting the steps of c) determining for each of a plurality of sample texts, a match score related to the number of descriptive terms present in or derived from that text that match those in the target document, where each of the plurality of sample texts has an associated classification identifier that identifies the one of more different classes to which that text belongs, (d) selecting one or more of the sample texts having the highest match scores, (e) recording the one or more classification identifiers associated with the one or more sample texts having the highest match scores, and (f) associating the one or more classification identifiers from step (e) with the target document, thereby to classify the target document as belonging to one or more classes represented by at least one of the classification identifiers from step (e), from the instant US application.** The cited omitting elements would not interfere with the functionality of the steps previously claimed and would perform the same function. In re Karlson, 136 USPQ 184 (CCPA 1963).

The dependent claims 17-21 of the instant application are rejected for fully incorporating the errors of their respective base claims by dependency.

Application Claim 22	Co-pending Application 15
<p>22. Computer readable code for use with an electronic computer and a database word records in classifying a target document in the form of a digitally encoded text as belonging to one or more of a plurality of different classes, where each record in the word records database includes text identifiers of the library texts that contain that word, an associated library identifier for each text, an associated classification identifier for each text, and optionally, one or more selectivity values for each word, where the selectivity value of a term in a library of texts in a field is related to the frequency of occurrence of that term in said library, relative to the frequency of occurrence of the same term in one or more other libraries of texts in one or more other fields, respectively, said code being operable, under the control of said computer, to perform steps comprising:</p> <p>(a) for each of a plurality of terms <u>selected from one of (i) non-generic words in the document, (ii) proximately arranged word groups in the document, and (iii) a combination of (i) and (ii), determining a selectivity value calculated as the frequency of occurrence of that term in a library of texts in one field, relative to the frequency of occurrence of the same term in one or more other libraries of texts in one or more other fields, respectively;</u></p> <p>(b) representing the document as a vector of terms, where the coefficient assigned to each term is a function of the selectivity value determined for that term</p> <p>(c) <u>determining for each of a plurality of sample texts, a match score related to the number of descriptive terms present in or derived from that text that match those in the target document, where each of the plurality of sample texts has an associated classification identifier that identifies the one of more different classes to which that text belongs,</u></p> <p>(d) <u>selecting one or more of the sample texts having the highest match scores,</u></p> <p>(e) <u>recording the one or more classification identifiers associated with the one or more sample texts having the highest match scores, and</u></p> <p>(f) <u>associating the one or more classification identifiers from step (e) with the target document, thereby to classify the target document as belonging to one or more classes represented by at least one of the classification identifiers from step (e).</u></p>	<p>15. Computer readable code for use with an electronic computer and a database word records in classifying a target document in the form of a digitally encoded text as belonging to one or more of a plurality of different classes, where each record in the word records database includes text identifiers of the library texts that contain that word, an associated library identifier for each text, an associated classification identifier for each text, and optionally, one or more selectivity values for each word, where the selectivity value of a term in a library of texts in a field is related to the frequency of occurrence of that term in said library, relative to the frequency of occurrence of the same term in one or more other libraries of texts in one or more other fields, respectively, said code being operable, under the control of said computer, to perform steps comprising:</p> <p>a) <u>accessing said database to determine, for each of a plurality of terms composed of non-generic words and optionally, proximately arranged word groups in document, a selectivity value of the term; and</u></p> <p>(b) representing the document as a vector of terms, where the coefficient assigned to each term is a function of the selectivity value determined for that term</p>

Table 6

Art Unit: 2162

It would have been obvious to one of ordinary skill in the art of data processing at the time the invention was made to modify the cited steps as indicated claim 22 of the instant US application since the omission and addition of the cited limitations would have not changed the process according to which the process of for classifying a target document in the form of a digitally encoded text as belonging to one or more of a plurality of different classes. Therefore, the ordinary skilled artisan would have been also motivated to modify claim 22 of the cited instant US application by deleting the steps of (c) determining for each of a plurality of sample texts, a match score related to the number of descriptive terms present in or derived from that text that match those in the target document, where each of the plurality of sample texts has an associated classification identifier that identifies the one of more different classes to which that text belongs, (d) selecting one or more of the sample texts having the highest match scores, (e) recording the one or more classification identifiers associated with the one or more sample texts having the highest match scores, and (f) associating the one or more classification identifiers from step (e) with the target document, thereby to classify the target document as belonging to one or more classes represented by at least one of the classification identifiers from step (e); and substituting the steps of selected from one of (i) non-generic words in the document, (ii) proximately arranged word groups in the document, and (iii) a combination of (i) and (ii), determining a selectivity value calculated as the frequency of occurrence of that term in a library of texts in one field, relative to the frequency of occurrence of the same term in one or more other libraries of texts in one or more other fields, respectively with the steps of **accessing said database to determine, for each of a plurality of terms composed of non-generic words and optionally, proximately arranged word groups in document, a selectivity value of the term, of claim 15 of the co-pending application.** The cited omitting elements would not interfere with the functionality of the steps previously claimed and would perform the same function. In re Karlson, 136 USPQ 184 (CCPA 1963).

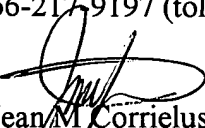
Art Unit: 2162

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean M Corrielus whose telephone number is (571) 272-4032. The examiner can normally be reached on 10 hours shift.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jean M Corrielus
Primary Examiner
Art Unit 2162

June 24, 2005